

**8: Your Guarantee of Satisfaction**

This product is guaranteed to the original purchaser against defects in material and workmanship for one year from the date of initial purchase. Activate this guarantee at the time of purchase by returning the Guarantee Card to the address on the front page. Keep a copy of your sales receipt for proof of guarantee status, should it be necessary.

The crossfader itself is a replaceable part and is only guaranteed against defective workmanship. The slider selected for the crossfader function has been chosen for its excellent mechanical properties. In a discotheque application the extensive use of this facility means that the number of operations in a twelve month period can exceed the manufactures electrical specification.

If a malfunction occurs, the dealer who supplied the unit will be happy to handle the repair. When returning a unit, use the original factory carton - do not chance inadequate packing materials. Simply tape a note to the unit describing the malfunction.

If your unit is out of guarantee, we recommend that you return it to an authorised Citronic dealer for repair or service. Experienced personnel, supported by specialist testing equipment, will be able to find and correct the fault in the most efficient and cost effective way.

**9: CE Marking*****EMC Conformity***

The CDM7:2C has been tested to demonstrate compliance with the EMC 89/336/EEC directive, under which the following harmonised standards apply :

- I) **EN55020** Electromagnetic Immunity
- ii) **EN61000-3-2** Mains Harmonic Disturbance Limits
- III) **EN61000-3-3** Voltage Fluctuation Limits
- iv) **EN55013** Electromagnetic Compatability

***Electrical Equipment Safety Regulations (1994)***

The CDM7:2C has been designed and tested to demonstrate compliance the LVD 73/23/EEC directive, using the following standard.

- i) **EN60065** Safety requirements for mains operated electronic equipment for household and similar general use

# CDM7:2C

## Professional DJ Mixer

**Citronic Limited,**  
Technical Services Department,  
Halifax Road,  
Bowerhill,  
Melksham  
Wiltshire  
SN12 6UB England.  
Tel : 01225 705600 Int: +44 1225 705600  
Fax: 01225 709639 Int: +44 1225 709639

## CITRONIC

Citronic Limited, innovative leaders in the manufacture of professional audio equipment, are proud to present the CDM7:2C Mixer

Established in Melksham Wiltshire, in 1972, the company occupies prestigious purpose built factory headquarters and is one of the leading employers in the area.

The Company's award winning product range covers professional audio Mixers, Amplifiers, Signal Processing and Loudspeakers. Each unit is manufactured to the highest possible standards, and all have an enviable reputation for reliability and value for money - the noted hallmark of Citronic products.

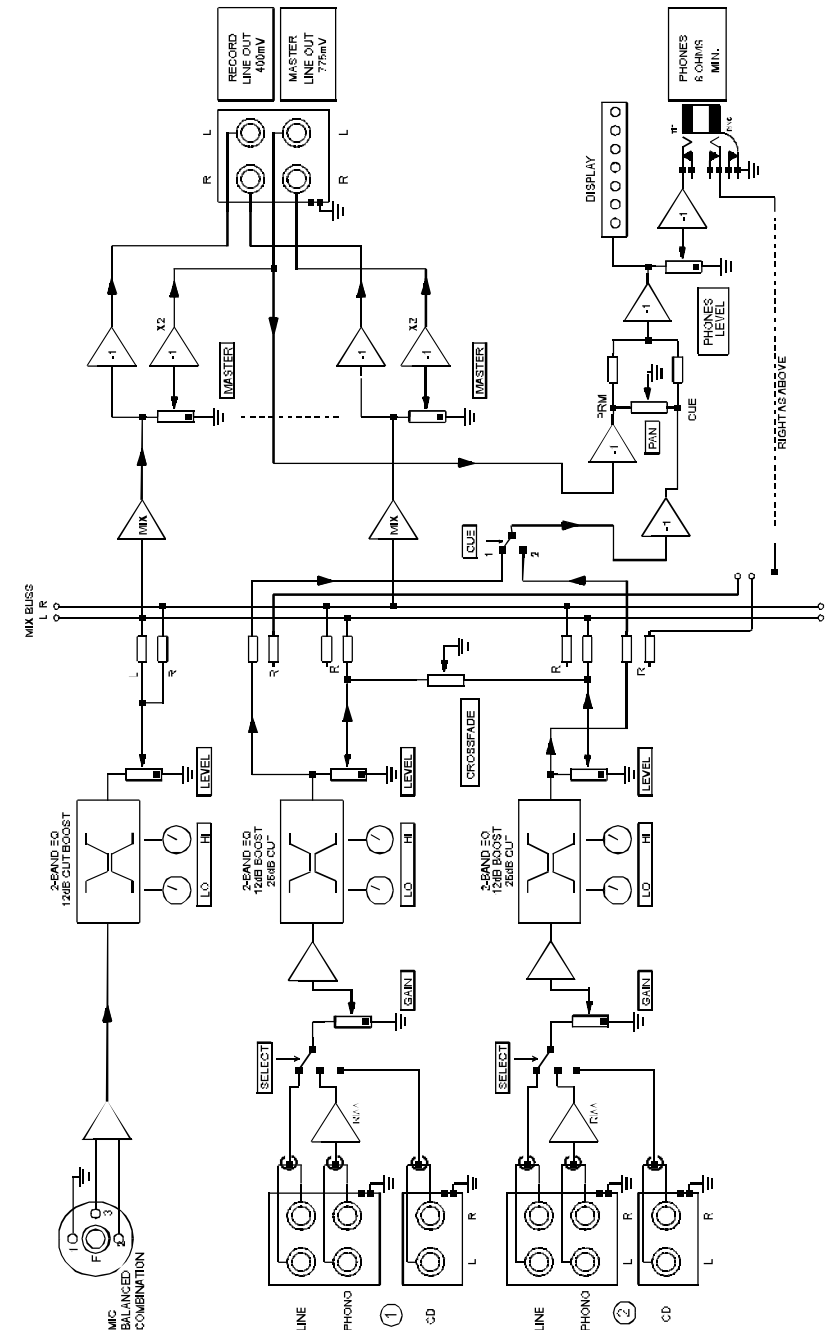
Substantial investment has been made in high technology CAD systems, manufacturing control and testing techniques. This sophisticated computerisation, coupled with an extensive research and development program, enables the company to offer an exceptional degree of manufacturing excellence and quality assurance.

Citronic has always listened carefully to the customer, and places tremendous emphasis on market research. This ensures that the exacting requirements of the installer and operator are complemented, without compromise, throughout the entire product range. This unique approach, coupled with a strong input from a highly qualified engineering team, ensures that Citronic maintains its position as a respected leader, in the industry's development.

Citronic has a distribution network throughout Europe, Asia and the Americas.

## WARNING

In order to obtain the best service from the unit we STRONGLY recommend that you read this manual before you apply any power.



<b>Input Sensitivity</b>	Mic	2.5mV @ 600 Ohms
	Phono	3mV @ 47K Ohms
	Line	260mV @ 100K Ohms
<b>Output Level</b>	Master Un-Balanced	775mV @ 600 Ohms
	Rec Un-Balanced	400mV @ 600 Ohms
	Headphones	300mV @ 8 Ohms
<b>Frequency Response</b>		20Hz to 20KHz $\pm 1$ dB (RIAA $\pm 2$ dB)
<b>Total Harmonic Distortion</b>		Less Than 0.1%
<b>Stereo Separation</b>		Better Than 45dB
<b>Signal To Noise Ratio</b>		Microphone 65dB
	Phono	70dB
	Line	75dB
<b>Equalisation</b>	Hi	+12dB -26dB (At frequencies above 10KHz)
	Lo	+12dB -26dB (At frequencies below 100Hz)

<b>1: About Citronic</b>	2	Microphone Depth	9
<b>2: Contents</b>	3	LED Bargraph Display	9
<b>3: Introduction</b>	4	Phono Inputs	9
The Mixer	4	CD Inputs	9
Inputs	4	Line Inputs	9
Punch Buttons	4	Unbalanced Master Output	9
Cue (pfl)	4	Record Output	9
Cue Pan	4	AC Power Cable	9
Outputs	4		
<b>4: Connecting Your Mixer</b>	5	<b>6: Block Diagram</b>	10
Cables & Connectors	5	<b>7: Technical Specification</b>	11
Balanced Outputs	5	Input Sensitivity	11
Switching On	5	Output Level	11
Power Supply	5	Frequency Response	11
Crossfader	5	Total Harmonic Distortion	11
		Stereo Separation	11
<b>5: Features</b>	6	Signal to Noise Ratio	11
Illustration	6	Equalisation	11
Power Switch	7	<b>8: Guarantee</b>	12
Power Indicator	7	<b>9: CE Marking</b>	12
Output Level	7	EMC Conformity	12
Headphone Pan	7	Safety Regulations	12
Headphone Socket	7		
Headphone Level	7		
Punch Button	7		
Input Selector	7		
Gain Control	7		
Hi Band Equaliser	7		
Lo Band Equaliser	7		
Cue Selector	7		
Input Fader	7		
Crossfader	9		
Microphone Input	9		
High Band Equaliser	9		
Lo Band Equaliser	9		

### The CDM7:2C

The CDM7:2C is a professional seven input DJ mixer. Six of the inputs are routed to two main input channels. These six inputs consist of 2 RIAA phono, 2 CD and 2 line.

Each of the two input channels offer extensive control over the mix by way of input select (transform), input gain, 2 band Eq (with rotary CUT) and a cue select.

The seventh input is a dedicated microphone input offering a 2 band Eq, input gain and override (talkover) facilities.

The crossfader operates between the two input channels controlling the signal to the output of the mixer. This means you can crossfade between channels 1 (on the left) 2 (on the right).

Citronic's much copied Punch button facility enhances the crossfade facilities still further, by allowing you to Punch in the music channel faded out on the crossfader and mix it on the Live channels. This way you can create exciting mixes by laying one input on top of another for the time you hold down the Punch button. You can use this feature like a transformer switch as well by tapping the Punch button to create stutter effects.

The CDM7:2 has a Cue (pfl) facility that can be independently switched per channel on to the headphones and 7 segment LED bar graph display. This feature allows you to listen to the input that is not yet on the output of the mixer so you can set it up for beatmixing or cuing.

Another Citronic development, the Cue Pan, is also fitted which allows you to listen on your headphones or view on the bar graph display, either the cue channel or the output. Any setting in between lets you preview a mix of any input channel with the current mixer output.

There is an output level control which sets the level to the master output channel. The master output is a unbalanced. A second output named 'Record Output' is provided at a fixed level of 400mV. This is useful for a 'Record' input feed or as a feed to another mixer etc.

All these comprehensive features are provided in a self contained unit complete with internal PSU.

### 14) **Crossfader**

A super fast action dipless crossfader between the input channels. The dipless action means that the signal only changes in level after the halfway point.

### 15) **Microphone Input**

A combination XLR & ¼" jack socket is mounted on the front face of the mixer for connecting your Microphone.

### 16) **Hi Band Equaliser**

This control changes the volume of the microphone signal for high frequencies. This means you can change the treble content of your microphone output.

### 17) **Lo Band Equaliser**

This control changes the volume of the microphone signal for low frequencies. This means you can change the bass content of your microphone output.

*Note: Excessive bass can lead to amplifier overload on the mixer output. If distortion is heard, reduce the Gain control to compensate.*

### 18) **Microphone Gain**

This control changes the volume of the microphone level on the output of the mixer.

### 19) **Microphone Depth**

The microphone signal can be arranged to "talkover" the music signal by using the Override Depth control. At "0" it has no effect on the music, while at "-20" it will duck the music signal by 20dB, allowing a clear "talkover".

The Attack and Release of the detector circuit is optimised for DJ use.

### 20) **LED Bargraph Display**

This LED Bargraph Display shows the signal level of either the mixer output or an input you have selected with the Cue button.

### 21) **Phono Inputs**

Input connectors for turntables with magnetic record player cartridges.

### 22) **CD Inputs**

Input connector for your CD player specially set up for the high level and dynamic range.

### 23) **Line Inputs**

Input sockets for line level inputs like professional tape machines or effects unit returns.

### 24) **Unbalanced Master Output**

Main output you should use for connection to your amplifier.

### 25) **Record Output**

This output is used for additional feed to such items of equipment as tape recorders.

The output level of the signal is 400mV and is not affected by the Master Level Control.

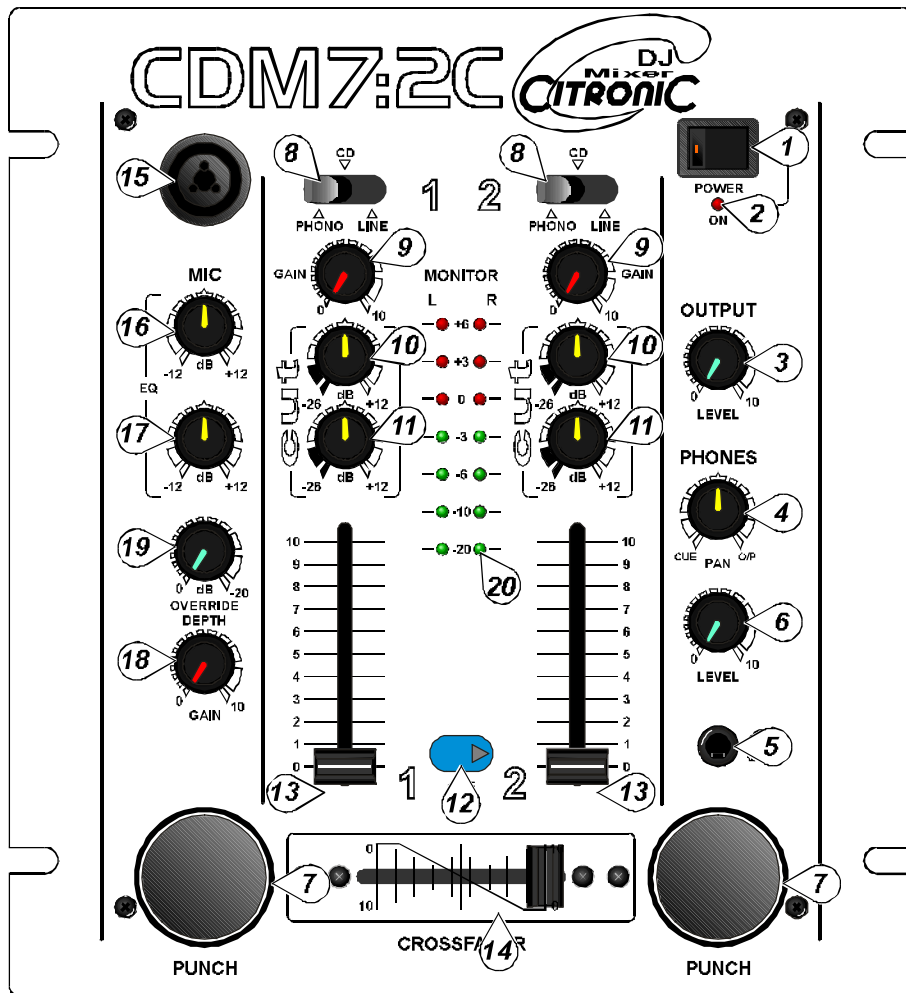
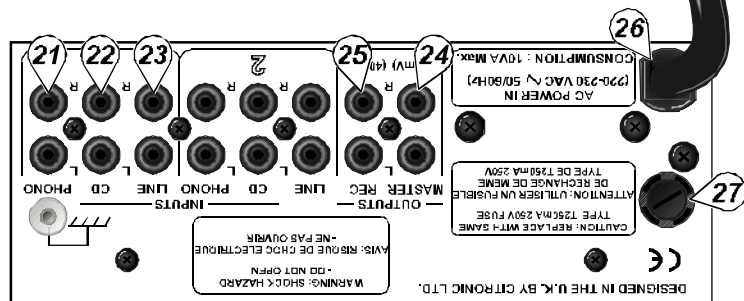
### 26) **AC Power Cable**

This cord comes fitted with an appropriate AC plug and is to connect to the usual AC supply wall socket.

### 27) **Fuse Holder**

This holder carries the 20mm fuse which is provided for safety. To change the fuse, if the unit fails to operate when correctly connected to the AC supply, follow the instructions on the rear of the mixer.

*Note: ALWAYS disconnect the AC power cord before changing the fuse.*



## Connecting Your Mixer

The following pages give a full description of the connectors and their purpose. You should study this carefully before you power up the mixer to ensure you get the very best performance from your CDM7:2C.

## Do's & Don'ts

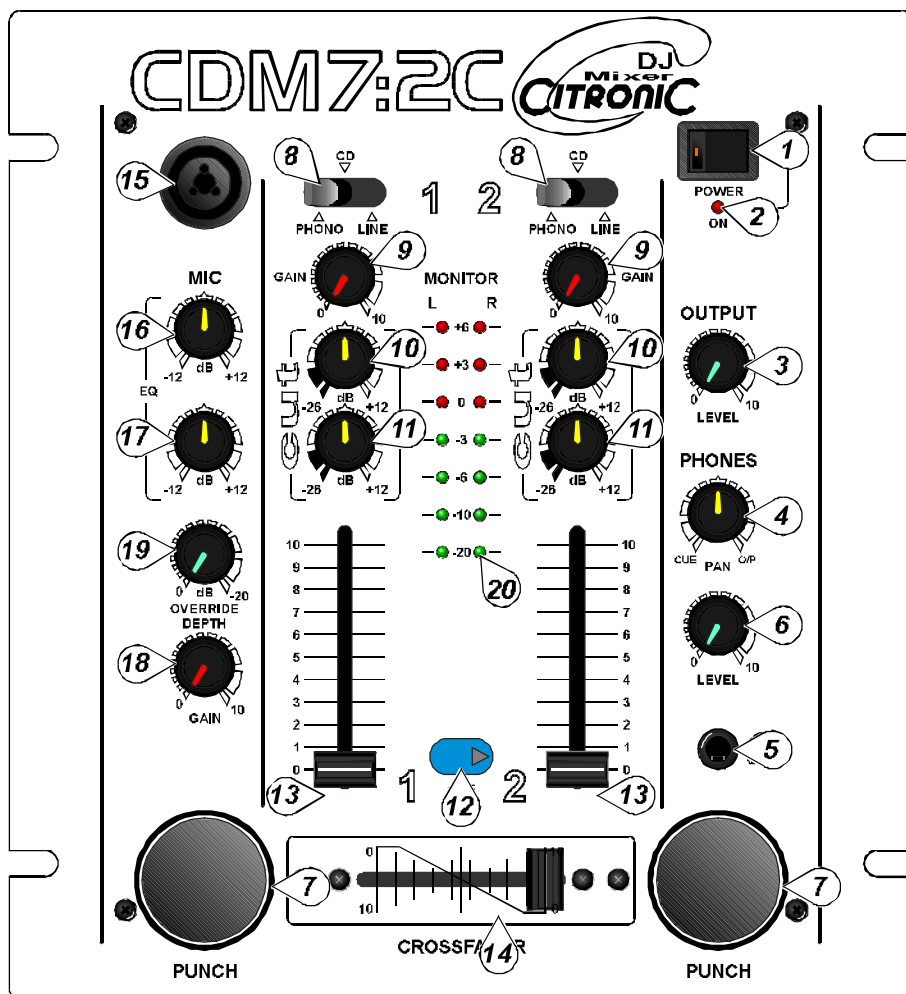
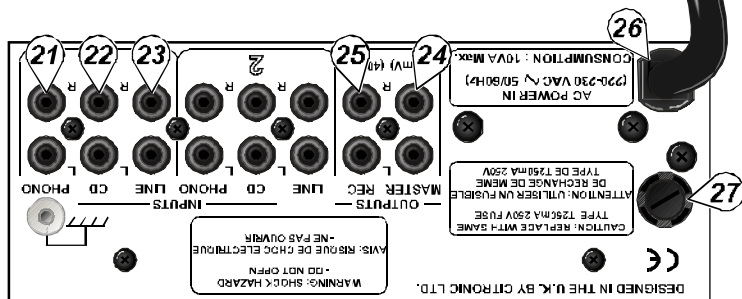
There are a few general Do's and Don'ts though that you should become familiar with if you have not had a great deal of experience with professional audio systems.

**Cables & Connectors** - Always use good quality cables and connectors. It might seem expensive when you first look at it, but the first time you have a problem in front of an audience you'll bless the day you made that small investment. 25 years in the business has taught us that over 75% of all problems with DJ systems are simple connector ones. Don't get caught out.

**Switching on your system** - Get in the habit of turning on the mixer and all the inputs to it before you turn on the amplifiers. The CDM7:2C has been designed not to harm your amplifiers or speakers if you turn on the amplifiers first, but this may not be true of the inputs plugged into the CDM7:2C Mixer. Play it safe, always turn on your amplifiers last.

**Power supply** - The power supply for your CDM7:2C is built into the mixer and will be fitted with a mains plug specifically for the mains supply in your country. If it does not match the power socket you wish to use check with your dealer before you plug it in. It is possible you could damage your mixer if it is not the correct version for your mains power supply. Worse still, it could be unsafe. Don't take chances with Mains Power - it can kill.

**Crossfader** - The crossfader is the most used feature on your mixer and great care has been taken in the choice of components for this function. Even so, it is the most likely thing to wear out first on your mixer, so we've made it quick and easy to replace. Don't get caught out, always carry a spare.



- Power Switch**  
Controls the AC power to the mixer.  
*Note: Be sure to switch on the power to your mixer before the amplification system.*
- Power Indicator**  
This indicator illuminates red when the AC Power is switched on.
- Output Level**  
This is a volume control for the Master output.  
*Note: This does not control the record output level*
- Headphone Pan**  
Turned to the left, it routes the cue signal to the headphones and Monitor display. To the right it sends the output signal to the headphones and monitor. Any position in between these extremes is a variable mixer of the cued input signal and the mixer output.
- Headphone Socket**  
This is a 1/4" stereo jack socket mounted on the front face of the mixer for you to attach your headphones.
- Headphone Level**  
This control varies the volume in your headphones.
- Punch Button**  
This Citronic invention is a really creative mixing tool that allows you to punch off-line inputs straight to the output mix. If you were using inputs 1 & 2 with input 2 faded out on the crossfader, but live on the input fader, you can mix input 2 to input 1 by hitting the punch button. This is a much faster action than crossfading as fast as you can. If you want transformer of stutter effects, this is the way to do it.
- Input Selector**  
Each input channel has three stereo input options. This switch lets you select which of the inputs plugged into the channel you wish to use. Both channels have 1 Phono (RIAA) input, 1 CD input and 1 Line input.
- Gain Control**  
This is the input gain trim control that allows you to customise the input gain so that the mixer output, or loudness, is the same for each channel with the input fader in the same position. This allows you to be sure of the output level before you have crossfaded it to the mix. Any distortion may be the result of the gain setting being too high.  
  
The 2 band Eq not only offers an ample 12dB of boost but each Eq band can be attenuated by at least 26dB. This provides the ability to CUT certain frequencies such as Bass or Treble.
- Hi Band Equaliser**  
This control changes the volume of the input signal for the high frequencies only. This means you can enhance hi frequency sounds in the music input.
- Lo Band Equaliser**  
This control boosts the volume of the bass frequencies. Take care here, bass frequencies are the most power demanding to reproduce and you need to be sure the boost you give it in the mixer can be handled by your amplifier and loudspeaker system. If distortion occurs while adjusting the EQ lower the input gain to compensate.
- Cue Selector**  
This control selects the input signal on the respective channel and routes it to the cue channel on the headphones and monitor.
- Input Fader**  
A High quality professional 60mm fader for controlling the mix level of the input to the main output.